



Summary

Main Features

ABOUT THIS PUBLICATION

This publication presents the results of the Characteristics of Small Business Owners Survey which was conducted in June 2003 as a supplementary topic in the Australian Bureau of Statistics (ABS) monthly Labour Force Survey. This survey of households addressed a number of aspects of the operations of small business as well as identifying the characteristics of small business operators. The survey covers all private sector, non-agricultural small businesses. Similar surveys were previously conducted in February 1995, February 1997, November 1999 and June 2001. The ABS plans to conduct the next survey in June 2004 followed by an expanded version of the survey in June 2005.

COMMENTS ON THIS PUBLICATION

The ABS welcomes comments and suggestions from users on data items for future surveys. They should be addressed to the Director, Business Demography and Frames Section, Australian Bureau of Statistics, Locked Bag 10, Belconnen ACT 2616.

RELATED PUBLICATIONS

Other publications which may be of interest are:

- **Small Business in Australia, 1999** (cat. no.1321.0) - biennial
- **Small Business in Australia, 2001** (cat. no. 1321.0)
- **Business Use of Information Technology, 2000-01** (cat. no. 8129.0) - annual.

UNPUBLISHED STATISTICS

More detailed small business statistics from the survey are available on request from the ABS. For example, many of the statistics presented here may be available by different cross classifications from the data presented in the publication.

ROUNDING

Where figures have been rounded discrepancies may occur between the sum of component items and the total.

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Murray Klee on Canberra (02) 6252 5452.

SUMMARY COMMENTARY

CHARACTERISTICS OF SMALL BUSINESS OPERATORS

This chapter presents information on Australian small business operators, including data on their age, sex, hours worked, and operators born in Australia and born overseas.

The term 'business operator' has been used to describe the person or persons who own and run the business. Generally these business operators can be identified as:

- the proprietor of a sole proprietorship
- the partners of a partnership
- the working director(s) of an incorporated company.

There is no standard definition of a small business operator and other ABS publications do not use the term, nor do they provide statistics about small business operators as a group. However, the expression 'small business operator' is one that is often used in research and policy debate and is generally taken to include the above group of people.

NUMBER OF OPERATORS

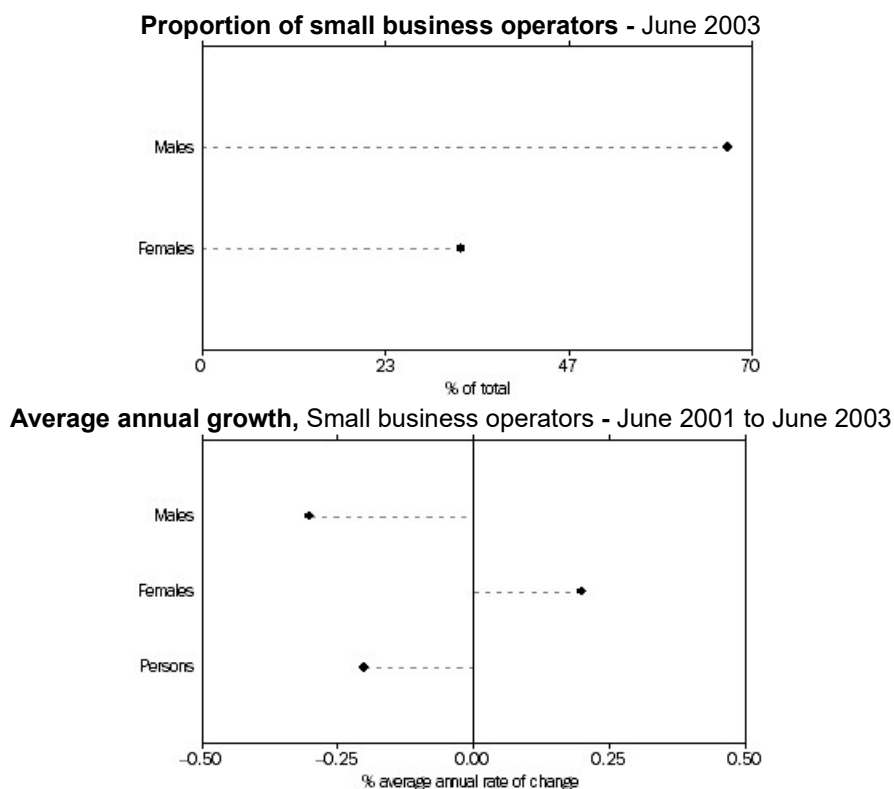
In June 2003 there were an estimated 1,591,500 business operators of the estimated 1,179,300 small businesses in Australia. Whereas, the annual average growth rate on the number of businesses was 0.7%, over the preceding two years the number of business operators declined, on average, 0.2%.

The contrasting growth rates between the number of operators and the number of small businesses (in table 3.2) is highlighted by the following:

- the rise in the proportion of small businesses with only one operator, an average annual increase of 2.4%
- the decline in the number of businesses with two operators, down by an average annual rate of 2.7%
- for businesses with three or more operators, an annual decrease of 2.0%.

SEX OF OPERATORS

Of the 1,591,500 small business operators, 1,063,000 (67%) were male and 528,600 (33%) were female at June 2003. The numbers for male and female operators remained consistent with the June 2001 survey findings.



LOCATION OF OPERATORS

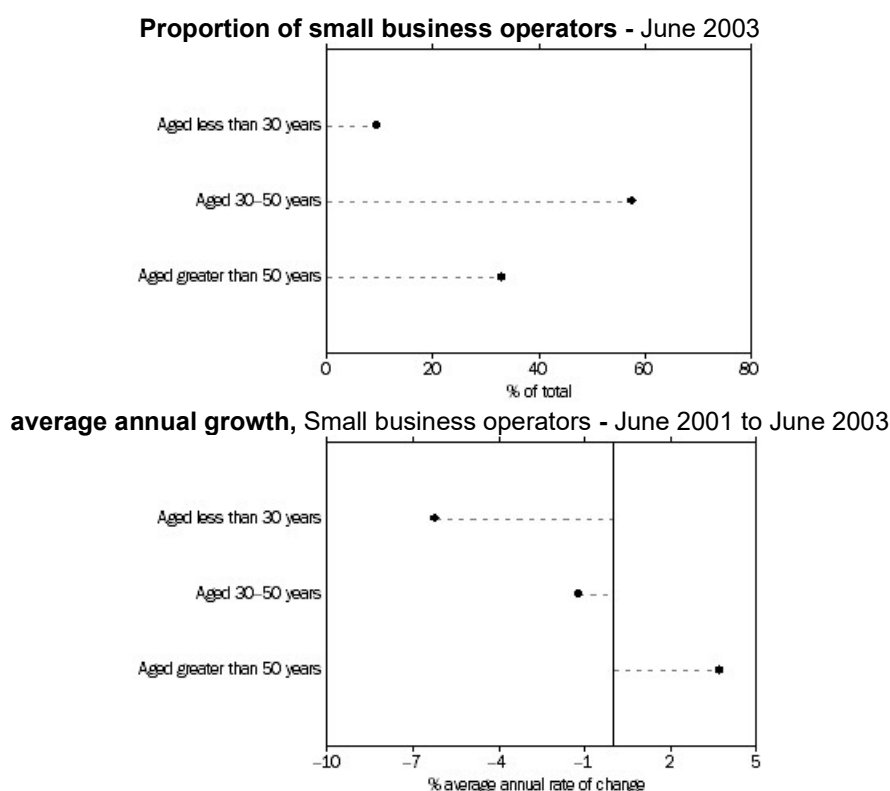
While the distribution of small business operators across states and territories generally reflected the population distribution, growth between June 2001 and June 2003 varied considerably between states. Victoria recorded the highest average annual growth rate of 3.1%. The results in Victoria were accentuated by the increase in female small business operators, where there was an average annual growth rate of 6.5%, more than five percentage points higher than the other states and territories. South Australia recorded the largest decrease in the number of operators down by 6.7%, with a 13% decrease in the number of female operators. Decreases were also recorded in the Australian Capital Territory (5.2%), the Northern Territory (3.0%) and Tasmania (2.7%).

AGE OF OPERATORS

Table 2.1 indicates that most small business operators (58%) were aged between 30 and 50 years. The distribution across age groups was as follows:

- 9.4% (149,600) were less than 30 years old
- 58% (917,300) were aged between 30 and 50 years
- 33% (524,600) were aged greater than 50 years.

The number of business operators aged greater than 50 years increased at an average annual rate of 3.7%. Those operators in age groups less than 30 years and those aged between 30 and 50 years recorded a decrease of an average annual rate of 6.2% and 1.2% respectively.



By sex

The distribution of small business operators by sex across the age groups at June 2003 was:

- for small business operators aged less than 30 years: 65% were male, 35% were female
- for small business operators aged between 30 years and 50 years: 65% were male, 35% were female
- for small business operators aged more than 50 years: 70% were male, 30% were female.

The number of male operators aged less than 30 years decreased by an average annual rate of 6.2%. However, for

male operators aged greater than 50 years the average annual rate increased by 2.4%. This was also true for females, female operators aged less than 30 years had a negative growth rate of 6.1% and those aged greater than 50 years increased by an average annual rate of 6.9%.

By state and territory

In Victoria, growth in the number of small business operators was strongest, up by an average annual rate of 3.1% overall. This growth was underpinned by the group aged 30 to 50 years which grew, by an average annual rate of 4.6%. In Victoria, the average annual rate of growth for those operators aged less than 30 years recorded a slight decrease of 0.3%, since June 2001. There was a slight increase in the average annual rate for operators aged greater than 50 years (1.3%).

The average annual increase of female operators was highest in Victoria (6.5%). Female operators aged less than 30 years led this growth, up by an average annual rate of 23%. In contrast, South Australia recorded the largest average annual decrease of small business operators of all of the states and territories (6.7%). This average annual decrease was accentuated by the decrease in female operators (13%), a three percentage point greater decline than any other state or territory.

USUAL HOURS WORKED BY OPERATORS

Table 2.2 shows details of hours worked by small business operators for both full-time and part-time operators.

Full-time operators

Of the 1.6 million small business operators in Australia at June 2003, just under 1.1million (66%) were classified as full-time operators; that is, they usually worked 35 or more hours each week in the business. This proportion has declined from 70% in June 2001 to 66% in June 2003.

For all small business operators:

- 41% usually worked between 35 and 50 hours each week
- 22% usually worked between 51 and 75 hours per week
- 3.6% usually worked more than 75 hours a week.

The overall decrease in full-time operators is underscored by the 5.3 percentage point decrease in the proportion of operators working 35-50 hours between June 2001 and June 2003.

By sex

An estimated 857,600 (81%) of male small business operators worked full-time and 49% of these operators usually worked between 35 and 50 hours a week.

In contrast, only 38% of female small business operators worked full-time and 25% of these operators usually worked between 35 and 50 hours a week. The average annual growth rates for male and female operators who worked more than 75 hours a week were 8.7% and 13% respectively.

BY STATE AND TERRITORY

Across the states, New South Wales recorded the highest proportion of small business operators that were working full-time in their business, with 69% working more than 35 hours per week. Most other states recorded around 65% of operators working full-time, with the exception of Western Australia (62%). The Northern Territory recorded the highest incidence of full-time operators at 76%. The Australian Capital Territory recorded the lowest proportion of full-time operators with 59%.

A similar distribution across the usual hours worked categories was recorded in each of the states and territories.

The Northern Territory recorded the highest proportion (9.3%) of all operators in the more than 75 hours usually worked category, as well as the highest proportion (31%) of all operators usually working between 51 and 75 hours per week. South Australia recorded the highest proportion (45%) of all operators usually working between 35 and 50 hours per week.

Part-time operators

Part-time operators, those who usually worked less than 35 hours a week in their business, constituted 535,000 (34%) of the 1.6 million small business operators in Australia at June 2003. Since June 2001 the proportion of part-time operators has increased from 29% to 34%.

In June 2003 there were 329,600 female small business operators working part-time, an average annual increase of 3.7% over the 2001 level of 306,800. The proportion of female part-time operators to total part-time operators increased to 62% in 2003 from 58% in 2001. The number of male small business operators working part-time increased by an average annual rate of 12%,

OPERATORS BORN IN AUSTRALIA OR BORN OVERSEAS

Table 2.3 shows details of operators born in Australia and those born overseas. In June 2003 an estimated 468,100 (29%) of small business operators were born overseas. This was consistent with the results recorded in June 2001.

By sex

An estimated 325,200 (31%) male small business operators were born overseas compared to 143,000 (27%) females. Over the period June 2001 to June 2003 the number of overseas born females increased by an average annual rate of 2.1%. The number of male small business operators born overseas was similar to the June 2001 results, with a slight decline of 0.3% in the average annual rate.

By state and territory

The state with the highest proportion of small business operators who were born overseas was Western Australia (39%). The proportion of overseas born operators in Western Australia increased to 39% in June 2003 from 37% in June 2001. New South Wales (33%) had the second highest proportion of small business operators born overseas, which was consistent with the June 2001 survey findings. Tasmania with 13% of small business operators born overseas, recorded the lowest proportion. The proportion of operators born overseas in Queensland remained steady at 24%. In contrast the Northern Territory recorded the greatest average annual rate of decrease (25%) of all the states and territories, from 33% in June 2001 to 19% in June 2003. This was followed by Tasmania where the proportion decreased from 18% in 2001 to 13% in 2003.

NUMBER OF BUSINESSES OPERATED

Table 2.4 provides data on the number of businesses owned by small business operators at June 2003, classified by the sex of operators and the number of businesses operated. Most operators (93%) were involved in just the one business; a further 5.3% were involved in two businesses and 1.9% were involved in three or more businesses.

By sex

Both male and female operators recorded similar figures as multiple business operators, with 7.4% and 6.9% respectively, involved in more than one business.

By state and territory

The proportions of operators involved in only one business were similar across all states and territories (between 91% and 94%).

CHARACTERISTICS OF SMALL BUSINESS

This chapter presents selected characteristics of small businesses including details of the ownership structure, business age, the use of computers and Internet access. Data are classified both by state/territory and business size.

Where comparable, estimates of businesses from the June 2001 and June 2003 surveys are presented in the tables, together with the average annual rate of change to assist analysis.

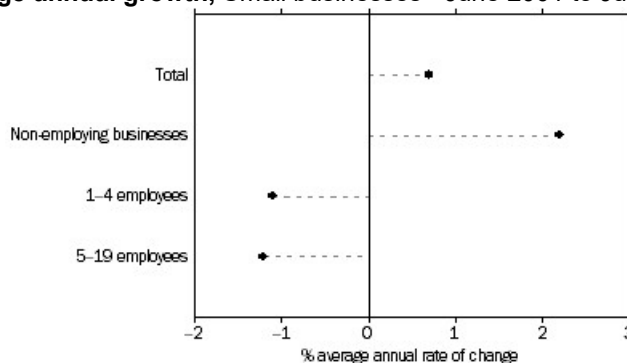
NUMBER OF BUSINESSES

There were an estimated 1,179,300 small businesses operating in Australia in June 2003. This represented a slight average annual increase of 0.7% since June 2001.

Of these:

- 666,200 (56%) were non-employing businesses, up by an average annual rate of 2.2% since June 2001
- 389,100 (33%) employed 1-4 people, down by an average annual rate of 1.1% since June 2001
- 124,000 (11%) employed 5-19 people, down by an average annual rate of 1.2% since June 2001.

Average annual growth, Small businesses - June 2001 to June 2003



LOCATION OF OPERATION

Small businesses were distributed across states and territories in a similar proportion to small business operators, reflecting the general population distribution within Australia. The strongest average annual growth over the period June 2001 to June 2003 was recorded in Victoria (4.3%), followed by Western Australia (2.8%) and the Northern Territory (2.6%); New South Wales, Queensland and Tasmania recorded similar levels to the June 2001 survey. South Australia and the Australian Capital Territory recorded decreases, down average annual rates of 5.5% and 6.6% respectively.

In the Northern Territory the growth was strongest in non-employing businesses, at an average annual rate of 25%, though in absolute terms this was an increase of only 1,900 businesses. In Victoria, growth was strongest for businesses employing 5-19 people, with an average annual growth rate of 7.8%. Victoria also grew strongly in the non-employing businesses category with an average annual rate of 5.0%. Not all states recorded growth in non-employing businesses, there was an average annual rate of decline of 6.7% in South Australia; 4.3% in the Australian Capital Territory and 0.4% in Queensland.

LENGTH OF OPERATION

Table 3.1 also provides details of the length of operation of small businesses. Length of operation refers to the length of time the business has been operated by the current owner. Where an established business has been taken over, the operations of the previous owner have not been taken into account.

Of the 1,179,300 small businesses operating in Australia at June 2003:

- 152,700 (13%) had been in operation for less than one year, down by an average annual rate of 2.2% from June 2001
- 398,500 (34%) had been in operation for one year but less than five years, down by an average annual rate of 1.4% from June 2001
- 239,200 (20%) had been in operation for five years but less than 10 years, up by an average annual rate of 3.9% from June 2001
- 388,900 (33%) had been in operation for 10 or more years, up by an average annual rate of 2.3% from June 2001.

By size of business

For non-employing businesses, the highest proportion (37%) were aged one to less than five years. For businesses employing 1-4 people, the highest proportion was 38% for businesses aged 10 or more years. In the larger size group (businesses employing 5-19 people), businesses were more likely to be older, with 49% of businesses falling into the 10 or more years category.

Across the different business size groups, the most significant positive growth in the number of businesses over the period June 2001 to June 2003 occurred in the older business category, particularly those in the five to less than 10 years category. There was an average annual increase of 6.2% in the number of non-employing businesses aged five to less than 10 years, 1.7% in the number of 1-4 employing businesses; and 1.4% in the number of 5-19 employing businesses.

Decreases were recorded in the less than one year category in all size groups. Tasmania reported the largest decrease in the less than one year category for non-employing businesses, with an average annual rate of decline of 25%.

OPERATORS PER BUSINESS

In June 2003, there were 808,300 (69%) small businesses operating as single operator businesses. This represented an average annual increase in single operator businesses of 2.4% since June 2001. The numbers of businesses with two operators, and three or more operators decreased by an average annual rate of 2.7% and 2.0% respectively over the same period.

By size of business

Table 3.2 shows that:

For non-employing businesses:

- 81% had one operator (compared to 78% in June 2001)
- 18% had two operators (compared to 21% in June 2001)
- 0.8% had three or more operators (which is consistent with the June 2001 survey results).

For businesses employing 1-4 people:

- 58% had one operator (which is consistent with the June 2001 survey results)
- 39% had two operators (compared to 40% in June 2001)
- 2.2% had three or more operators (compared to 2.1% in June 2001).

For businesses employing 5-19 people:

- 34% had one operator (compared to 32% in June 2001)
- 55% had two operators (compared to 56% in June 2001)
- 12% had three or more operators (which is consistent with the June 2001 survey results).

By state and territory

There was little variation across states and territories with the Northern Territory (78%), New South Wales, Victoria and South Australia (70%) recording the highest proportion of small businesses with one operator. For small businesses with three or more operators, the highest proportions were recorded in Queensland (3.0%) and the lowest in the Northern Territory (1.2%).

PREDOMINANT SEX OF OPERATORS

Of the 1,179,300 small businesses in Australia in June 2003, 649,600 (55%) were operated by an individual male or predominantly by males. This represented an average annual increase of 1.4% since June 2001.

There were 299,600 businesses (25%), operated by equal numbers of males and females. The number of businesses in this group declined, down an average annual rate of 3.9%, from the 324,600 businesses recorded in June 2001, reversing the average annual increase of 6.2% over the 1999 data.

There was a further 230,200 businesses (20%) operated predominantly by females, up from 205,900 businesses in June 2001, an average annual growth of 5.7%.

By size of business

The non-employing business category was the most common business size group for both predominantly male operated businesses (59%) and predominantly female operated businesses (75%). The number of predominantly female operated non-employing businesses recorded an average annual growth rate of 9.9%, which was much higher than the growth rate for non-employing businesses predominantly operated by males, which had an average rate of growth (1.3%).

Businesses operated by equal number of male and female operators were more evenly spread across the three business size categories:

- 109,300 (37%) of businesses were non-employing businesses, down by an average annual rate of 4.6%
- 136,000 (45%) of businesses were employing 1-4 people, down by an average annual rate of 2.7%
- 54,300 (18%) of businesses were employing 5-19 people, down by an average annual rate of 5.6%.

USE OF COMPUTERS AND THE INTERNET

In June 2003, 846,500 (72%) of the 1,179,300 small businesses reported they were using computers in their business operations. As the size of the business increases, the likelihood that a business uses a computer increases, with 94% of businesses with 5-19 employees using a computer, compared to 62% of non-employing businesses. The figures for all business sizes has increased since June 2001, the overall average annual rate of growth is 4.6%.

When comparing these results to that of other ABS series, it should be noted that some series only measure the use of computers and the Internet by employing businesses.

Use of computers

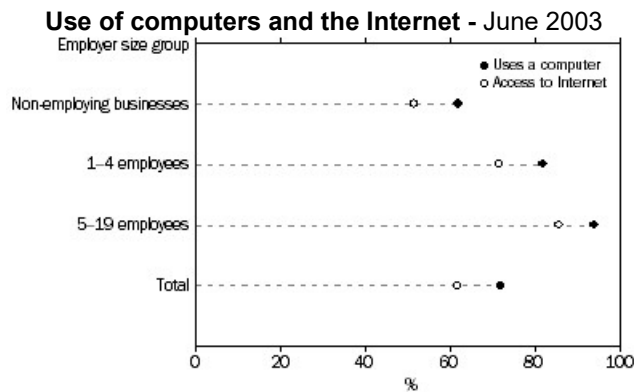
Table 3.4 shows that between June 2001 and June 2003, there was a strong growth in the number of businesses using computers:

- 412,000 (62%) of non-employing businesses had a computer, up from 354,400 (56%) in June 2001
- 318,100 (82%) of businesses employing 1-4 people had a computer, up from 306,700 (77%) in June 2001
- 116,400 (94%) of businesses employing 5-19 people had a computer, up from 112,300 (89%) in June 2001.

Businesses that had access to the Internet increased to 727,700 businesses (62%) an average annual growth rate of 9.2%. Again the use of the Internet was more common in the larger businesses:

- 343,400 (52%) of non-employing businesses had access to the Internet, up from 271,500 (43%) in June 2001

- 278,200 (72%) of businesses employing 1-4 people had access to the Internet, up from 245,600 (62%) in June 2001
- 106,100 (86%) of businesses employing 5-19 people had access to the Internet, up from 92,900 (73%) in June 2001.



Use of Internet

The major uses of the Internet for small business operators include E-mail (52%), Research (48%), Making or receiving payments (29%) and 'Other' (53%). The 'Other' category can encompass a wide range of Internet related activities and this may contribute to the high response rate in this category.

It should be noted that 'making and receiving payments' is not a measure of E-commerce or I-commerce, as these are defined as ordering goods and services electronically or via the Internet, not on the method of making/receiving payments.

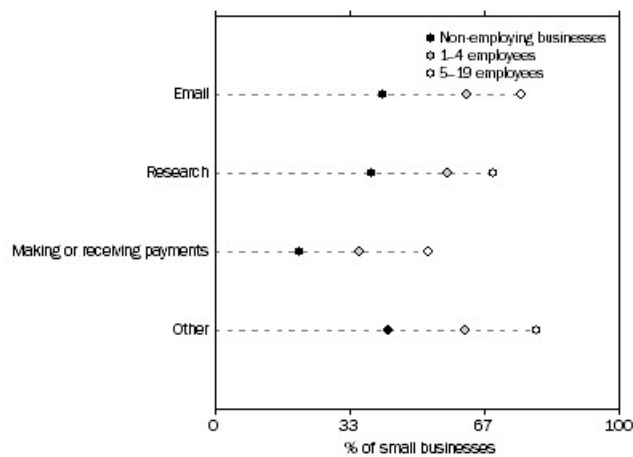
Between June 2001 and June 2003 use of the Internet by non-employing small businesses reported increases across the various uses as well as an overall average annual rate of increase of 2.2%. Proportionally, employing businesses made greater use of the Internet than did non-employing businesses, but the rate of growth in the two year period to June 2003 was greatest amongst non-employers.

More than half (52%) of small businesses used the Internet for e-mail, at June 2003 there was an average annual increase of 9.5%. Making or receiving payments increased significantly (an average annual rate of increase of 28% during the period June 2001 and June 2003). Almost 30% of all small businesses were using the Internet for this purpose, at June 2003, with non-employing small businesses significantly increasing their usage (an average annual rate of increase of 35%).

At June 2003, there were some 29% (up from only 18% of small businesses in June 2001) involved in 'making or receiving payments' via the Internet. Increasing use of the Internet for 'making and receiving payments' is reported across all small business sizes:

- 21% (139,800) of non-employing businesses used the Internet for 'making and receiving payments', up from 12% (76,300) in June 2001
- 36% (140,200) of businesses employing 1-4 people used the Internet for 'making and receiving payments', up from 22% (86,800) in June 2001
- 53% (65,600) of businesses employing 5-19 people used the Internet for 'making and receiving payments', up from 37% (47,100) in June 2001.

Uses of the Internet by small businesses - June 2003



By state and territory

The proportion of small businesses using computers in their business operations was relatively consistent (70%-75%) across most states and territories. The Australian Capital Territory recorded the highest proportion with 75% of small businesses using computers. The Northern Territory, where 60% of small businesses were using computers, was more than 10 percentage points lower than any other state or territory.

Access to the Internet across states and territories followed a similar pattern to computer usage with levels highest in the Australian Capital Territory (68%) and lowest in Tasmania and the Northern Territory (both 57%).

HOME BASED SMALL BUSINESS

Home based businesses have been identified based on two definitions:

- where most of the work of the business was carried out at the home(s) of the operator(s) - these businesses are referred to as 'Businesses operated at home'
- where the business has no other premises owned or rented other than the home(s) of the operator(s) - these businesses are referred to as 'Businesses operated from home'.
- When combining figures for the two groups it should be noted that some overlap does occur.

In the first edition of this publication (1995), businesses were considered home based if 'one or more of the operators of the business worked more hours at home than away from home'. This definition is similar to the category 'Businesses operated at home' (as defined above), but is not strictly comparable.

NUMBER OF HOME BASED BUSINESSES

Home based businesses make up a very large proportion of the total small business population in Australia. At June 2003, there were an estimated 784,800 home based small businesses which were either operated from home or operated at home. This represented 67% of all small businesses. These businesses were operated by 987,700 people, representing 62% of all small business operators. Since June 2001, the number of home based businesses has increased at an average annual rate of 0.4% while the number of operators involved decreased at an average annual rate of 0.6% over the same period. These rates compare with an average annual growth rate of 0.7% for small businesses in general and an average annual decline rate of 0.2% for small business operators overall.

At June 2003, 95% (748,200) of all home based small businesses were operated from home. This represented a small average annual increase of 0.3% since June 2001. These businesses involved 935,100 operators, down by an average annual rate of 0.5% since 2001.

In June 2003, there were 280,600 small businesses (36%) operated at home, involving 360,100 operators. For this category growth was stronger, with the number of businesses increasing at an average annual rate of 2.7% and the number of operators increasing at an average annual rate of 1.0% over the two year period.

As mentioned above, overlap can occur between the 'operated at home' and 'operated from home' definitions as businesses can operate without premises and also have most of the work carried out at the home of the operators. In June 2003 there were 244,000 of these businesses involving 307,500 operators.

HOME BASED SMALL BUSINESSES

	Number of businesses '000	Number of operators '000
Operated from home	748.2	935.1
Operated at home	280.6	360.1
Operated both from home and at home	244.0	307.5
Total home based, operating either from home or at home	784.8	987.7
Total home based and non-home based businesses	1,179.3	1,591.5

OPERATORS OF HOME BASED BUSINESSES

By sex

At June 2003, across all home based small businesses, 669,600 (68%) operators were male. This represented an average annual decrease of 0.9% over the two years since June 2001. There were 318,100 female operators of home based businesses which represented an average annual increase of 0.1% over the same period. Males were less dominant in the 'operated at home' category, where they made up 54% of all such operators. This compared to the 'operated from home' category, for which 68% of such operators were male.

By age

The age distribution of home based small business operators was very similar to the overall distribution for small businesses with 11% aged less than 30 years; 57% aged between 30 and 50 years; and 33% more than 50 years old.

By hours worked

Home based operators were more likely to be working part time than all small business operators, with 41% usually working less than 35 hours per week. This compares with 34% for all small business operators. Female home based business operators in particular were more likely to work part time in their business than those in all small businesses, with 73% working less than 35 hours compared to 62% overall. For male home based business operators, only 26% were working part time compared to 19% overall.

Born in Australia or born overseas

The proportion of home based small business operators who were born overseas was 29%, the same proportion recorded for all small business operators.

Number of businesses operated

At June 2003, 94% of home based business operators operated just the one business; this compared with 93% across all small businesses.

By state and territory

Home based small business operators were distributed across states and territories in a similar proportion to small business operators overall, with both reflecting the general population distribution within Australia.

In terms of change since June 2001, the strongest growth in the number of home based business operators was recorded in Western Australia with an average annual increase of 5.2%, and Victoria with an average annual

increase of 2.0%. At the other end of the scale, the greatest declines in the number of home based business operators were in the Australian Capital Territory and the Northern Territory, which recorded average annual decline rates of 11% and 6.5% respectively. South Australia reported an average annual decline rate of 5.8%.

CHARACTERISTICS OF HOME BASED BUSINESSES

Table 4.3 shows a range of characteristics of home based small businesses. Of the 784,800 home based small businesses operating at June 2003 most (70%) were non-employing businesses. There were 214,500 (27%) home based businesses employing 1-4 people and 20,000 (2.5%) employing 5-19 people.

In terms of age of business, home based businesses followed a similar distribution pattern to that of total small businesses with:

- 15% aged less than one year old
- 35% aged one year to less than five years
- 20% aged five years to less than 10 years
- 30% aged 10 years or more.

Operators per business

In June 2003, 76% of home based small businesses were single operator businesses. This proportion was higher than that recorded for small businesses overall where 69% were single operator businesses. Conversely, there was a lower proportion of multi-operator home based small businesses, with 24% of home based small businesses having two operators, compared to 29% of small businesses overall, and 1.0% having three or more operators, compared to 2.4% overall.

Predominant gender of operators

Most home based businesses (58%) were operated predominantly by males, which is consistent with the figure recorded in June 2001. The number of home based businesses operated predominantly by females increased from 19% in June 2001 to 21% by June 2003. The proportion of businesses operated by equal numbers of males and females decreased to 21% in June 2003, an average annual decrease of 5.0%.

Use of computers and the Internet

At June 2003, 529,600 (68%) of Australia's home based businesses were using computers in their business operations. This was slightly below the proportion recorded for all small businesses (72%). In addition, 460,500 (59%) businesses had access to the Internet; this is marginally below the proportion for all small businesses (62%). The most common use being made of the Internet was for e-mail and other purposes (49% of home based small businesses). In addition, 45% were using the Internet for research purposes; and 26% were involved in 'making or receiving payments' via the Internet. Use of the Internet for this latter purpose increased at an average annual rate of 29% between June 2001 and June 2003.

About this Release

ABOUT THIS RELEASE

This reissue replaces Main Features released on 28 April. Previous version did not include commentaries relating to small business operators and small business.

Contains details of the June 2004 supplementary survey of households looking at the characteristics of small business operators and their businesses. Provides data on age, sex, ethnicity and hours worked as well as the length of operation of the business, number of operators per business and the use of computers and the Internet by small businesses. Where data are available, comparisons are drawn with previous survey results. Businesses based at home are also examined.

Explanatory Notes

Explanatory Notes

INTRODUCTION

1 The Characteristics of Small Business Owners survey, Australia, was conducted in June 2003 as a supplementary topic to the Labour Force Survey. Similar surveys were conducted previously in respect of February 1995, February 1997, November 1999 and June 2001.

2 The Labour Force Survey is designed to regularly collect specific data on demographic and labour force characteristics of the Australian population. From time to time supplementary and special surveys of particular aspects of the labour force or other subjects are carried out.

DATA COLLECTION METHOD

3 The data were collected by trained interviewers over a two week period. When completing the Labour Force Survey, those people whose main job or second job was operating a small business with less than 20 employees were asked some additional questions relating to the operations of that business.

4 The supplementary survey asked small business operators to provide details on themselves as operators of small businesses and on the operations of their particular business. If there was more than one operator of the same small business in a household only one of the operators was asked to complete the questions relating to the operations of that business.

5 The above method enabled the estimation of two discrete populations:(i) Small business operators and their characteristics.(ii) Small businesses and their characteristics.

SCOPE OF THE SURVEY

Business size

6 Only those businesses which employ less than 20 people and their operators are included in the survey results.

Industry

7 All businesses identified were classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC) (cat. no. 1292.0), a detailed description of which appears in ANZSIC 1993.

The survey included businesses in the following industries: Mining Manufacturing Construction Wholesale trade Retail trade Accommodation, cafes and restaurants Transport and storage Communication services Finance and insurance Property and business services Education, Health and community services Cultural and recreational services Personal and other services.

Geographical areas

8 The survey covered both rural and urban areas in all states and territories, excluding some 175,000 persons living in remote and sparsely settled parts of Australia. The exclusion of these persons will have only a minor impact on any aggregate estimates that are produced for individual states or territories, with the exception of the Northern Territory where such persons account for over 20% of the population.

Persons

9 The population for the survey includes all persons aged 15 years or over except:

- diplomatic personnel of overseas governments
- overseas residents temporarily in Australia
- members of non-Australian defence forces and their dependants stationed in Australia
- members of the permanent Australian defence forces
- boarding school students
- people in institutions such as hospitals, sanatoria and inmates of jails, reformatories etc.

10 While these categories of people have an effect on the measurement of labour force levels, their exclusion is not expected to have significant impact on the identification of small businesses.

SURVEY DESIGN

11 As the Characteristics of Small Business Owners survey is a supplementary survey to the Labour Force Survey, it has the same basic design. The survey was based on a multi-stage area sample of private dwellings (about 30,000 houses and flats), and covered about one-half of one per cent of the population of Australia.

COVERAGE OF THE SURVEY

12 Coverage rules are applied which aim to ensure that each person is associated with only one dwelling, and hence has only one chance of selection. The chance of a person being enumerated at two separate dwellings in the one survey is considered to be negligible.

13 Persons who are away from their usual residence for six weeks or less at the time of the interview are enumerated at their usual residence.

PREVIOUS ESTIMATES

14 Where comparative data are available, this publication presents estimates from the June 2001 Characteristics of Small Business Owners Surveys.

RELIABILITY OF ESTIMATES

15 The estimates provided in this publication are subject to two types of error: sampling error and non-sampling error.

Sampling error

16 As the estimates in this publication are based on information obtained from occupants of a sample of dwellings they are subject to sampling variability, that is, the estimates may differ from those that would have been produced if all dwellings had been included in the survey.

17 One measure of the likely difference is given by the standard errors (SEs) (see the tables in the Appendix), which indicate the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three (67%) that a sample estimate will vary by less than one SE from the estimate that would have been obtained if all dwellings had been included, and about nineteen chances in twenty (95%) that the difference will be less than two SEs.

18 Another measure of the sampling variability is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate to which it refers. The RSE is a useful measure in that it provides an immediate indication of the error likely to have occurred due to sampling expressed as a percentage of the estimate.

19 As the Appendix shows, the size of the SE increases with the size of the estimate. However, the smaller the estimate the higher the RSE. Thus, larger estimates will be relatively more reliable than smaller estimates.

20 Very small estimates are subject to large RSEs, so that their value for most practical purposes is unreliable. In the tables in this publication, only estimates with RSEs of less than 25% are considered reliable for most purposes. Estimates with RSEs greater than 25% but less than or equal to 50% are preceded by an asterisk (e.g. *3.4) to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs of greater than 50%, preceded by a double asterisk (e.g. **0.3), are considered too unreliable for general use and should only be used to aggregate with other estimates to provide derived estimates with RSEs of 25% or less.

21 Space does not allow for separate indication of the standard errors of all estimates in this publication. As a guide, the Appendix provides an average standard error applicable for estimates of the number of small business operators and the number of small businesses for any classification. Each SE Appendix is derived from a mathematical model, referred to as the 'SE model', which is created using data from the survey. It should be noted that the SE model only gives an approximate value for the SE for any particular estimate, since there is some minor variation between SEs for different estimates of the same size.

22 If the actual value for a particular estimate is not shown in the Appendix, an approximate SE can be derived by taking the SEs shown for estimates on either side of the required value and interpolating a figure within that range.

Calculations of Standard Error (SE)

23 An example of the calculation and the use of SEs in relation to estimates of the number of small business operators is as follows. The table 2.1 shows that the estimated number of male small business operators in New South Wales is 345,100. Since this estimate is between 300,000 and 500,000, Appendix A shows that the SE for New South Wales will be between 10,400 and 12,900, and can be approximated by interpolation using the following general formula:

$$\begin{aligned} \text{SE of estimate} &= \text{lower SE} + (((\text{size of estimate} - \text{lower estimate}) / (\text{upper estimate} - \text{lower estimate})) \times (\text{upper SE} - \text{lower SE})) \\ &= 10,400 + (((345,100 - 300,000) / (500,000 - 300,000)) \times (12,900 - 10,400)) \\ &= 10,964 \\ &= 11,000 \text{ (rounded to the nearest 100)} \end{aligned}$$

24 Therefore, there are about two chances in three that the value that would have been produced if all dwellings had been included in the survey will fall in the range 334,100 to 356,100 and about 19 chances in 20 that the value will fall in the range 323,100 to 357,100.

25 Similarly, SEs are calculated for estimates of the number of small businesses using the Appendix. For example, table 3.1 shows that the estimated total number of small businesses in Australia is 1,179,300. This estimate is between 1,000,000 and 2,000,000, so the SE for this estimate will be between 18,100 and 26,200, and can be approximated using the same interpolation formula as above, with the resulting SE being 19,600 (rounded to the nearest 100).

Proportions and percentages

26 Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below. This formula is only valid when x is a subset of y.

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

27 For example, in table 2.1, the estimate for the total number of small business operators in NSW is 501,400. The estimated number of male small business operators in NSW is 345,100, so the proportion of small business operators in NSW who are male is 345,100/501,400 or 68.8%. The SE of the total number of small business operators in NSW may be calculated by interpolation as 12,900. To convert this to a RSE we express the SE as a percentage of the estimate, or 12,900/501,400 = 2.6%. The SE for the number of male small business operators in NSW was calculated above as 11,000, which converted to a RSE is 11,000/345,100 = 3.2%. Applying the above formula, the RSE of the proportion is

$$RSE = \sqrt{(3.7)^2 - (3.2)^2} = 1.9\%$$

giving a SE for the proportion (68.8%) of 1.3 percentage points (= (68.8/100)*1.9).

28 Therefore, there are about two chances in three that the proportion of small business operators in NSW who are male is between 67.5% and 70.1% and 19 chances in 20 that the proportion is within the range 66.2% to 71.4%.

29 Similarly, SEs can be calculated for estimates of the proportion of small businesses using the same formula.

Differences

30 Published estimates may also be used to calculate the difference between two survey estimates (of numbers or percentages). Such an estimate is subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

31 While this formula will only be exact for differences between separate and uncorrelated characteristics or sub-populations, it is expected to provide a good approximation for all differences likely to be of interest in this publication.

Non-sampling errors

32 The imprecision due to sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur due to non-sampling errors.

33 Non-sampling errors can occur whether the estimates are derived from a sample or from a complete enumeration. Three major sources of non-sampling error are:

- Inability to obtain comprehensive data from all people included in the sample. These errors arise because of differences which exist between the characteristics of respondents and non-respondents.
- Errors in reporting on the part of both respondents and interviewers. These reporting errors may arise through inappropriate wording of questions, misunderstanding of what data are required, inability or unwillingness to provide accurate information and mistakes in answers to questions.
- Errors arising during processing of the survey data. These processing errors may arise through mistakes in coding and data recording.

34 Non-sampling errors are difficult to measure in any collection. However, every effort was made to minimise these errors. In particular, the effect of the reporting and processing errors described above was minimised by careful questionnaire design, intensive training and supervision of interviewers, asking respondents to refer to records whenever possible and extensive editing and quality control checking at all stages of data processing.

SURVEY ESTIMATION AND WEIGHTING PROCEDURES

35 Estimates derived from the survey are obtained by using a calibrated weighting procedure which ensures that the survey estimates conform to an independently estimated distribution of the population by area of residence, age and sex.

36 Two separate weights were used for the survey:

- a person weight used in the estimation of small business operators
- a business weight used in the estimation of small businesses.

37 Each person in the sample is assigned a 'weight' which takes into account their probability of selection in the sample from their region, with adjustments to account for under-enumeration (e.g. non-response) at the age and sex level.

38 The 'weights' are also adjusted to reduce the bias introduced by varying levels of non-response in different sub-groups of the population.

39 Business weights are derived from the person weights using partner per business information.

Glossary

Business operator(s)

There is no standard definition of a small business operator and other ABS publications do not use the term, or provide statistics about small business operators as a group. However, the expression 'small business operator' is one that is often used in research and policy debate and is generally taken to include the following group of people:

The person or persons who own and run the business. Generally these business operators can be identified as:

- the proprietor of a sole proprietorship
- the partners of a partnership
- the working director(s) of an incorporated company.

Computer

Includes personal computers (PCs), laptops, note books, mainframes and mini-computers.

Email

Electronic mail is a facility which allows network users to exchange messages (including text and attachments).

Full-time (work)

Employed persons who usually worked 35 hours or more a week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

Home based businesses

Where the person(s) usually conducts most of their work at or from their residential address. Refer also to Chapter 4 - Introduction, for additional clarification.

Internet

A world-wide collection of computers which are linked together to form a repository of stored information and to provide a range of communication services. These services include, but are not limited to, the World Wide Web (www), Internet Electronic Data Interchange and Simple Mail Transport Protocol (SMTP).

Operated at home

A home based business where most of the work of the business was carried out at the home(s) of the operator(s).

Operated from home

A home based business where the business had no other premises owned or rented other than the home(s) of the operator(s).

Part-time (work)

Employed persons who usually worked less than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week.

Small business

Small businesses (excluding agricultural businesses) are those businesses employing less than 20 people. The categories presented in this publication are as follows:

- non-employing businesses - sole proprietors and partnerships without employees
- businesses with 1-4 employees
- businesses with 5-19 employees.

Together, these three groups form the small business category - those businesses employing less than 20 people.

Note that because operators of all incorporated businesses are considered employees of that corporation, all incorporated businesses will be classified as employing businesses.

Abbreviations

The following abbreviations have been used in this publication

ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
FTE	full-time equivalent
RSE	relative standard error
SE	standard error